

No. 3. — *Batrachia and Reptilia from the Bahamas.*

By THOMAS BARBOUR.

THIS paper is the fourth of a series based on collections made by Dr. G. M. Allen, Mr. Owen Bryant, and the writer during part of the summer of 1904 (June 28–July 28). We collected on the islands of New Providence, Great Abaco, Little Abaco, Grand Bahama, as well as on a number of outlying cays. Some specimens from New Providence Island, taken by the author in 1901, and a large series collected by Mr. Bryant at Mangrove Cay, Andros Island, from August 1–7, 1904, are included. All the material mentioned is now in the Museum of Comparative Zoölogy, in Cambridge, Mass. A considerable number of other specimens, also in the collection of the Museum, have been utilized.

Cope has summed up the relations which the Bahaman reptilian fauna bears to the surrounding regions in a paper in the Proceedings of the United States National Museum, 1887, Vol. 10, pp. 436–439. Since then several peculiar species have been added by Garman, Bulletin Essex Institute, 1888, Vol. 20, pp. 101–113.

BATRACHIA.

*Trachycephalus septentrionalis* Tsch.

This tree-toad was abundant on New Providence Island, where we obtained fourteen specimens. Most of these were taken during the daytime, sitting among the leaves of orange and lemon trees, or on sisal plants. When approached, they made little or no effort to escape. Their noise at night sounds like that of a rope drawn through an uncoiled pulley. The species was less common at Little Abaco, where only one specimen was obtained, though several others were heard. There is a specimen in the Museum from Andros Island, where Mr. Bryant heard several, but failed to obtain one. Garman has recorded the species from Rum Cay.

M. C. Z. No. 2415.

*Distribution.* — Bahamas, Cuba, Jamaica, and San Domingo.

**Hyla squirella** Bosc.

Two specimens of this species from the reeds of a brackish water marsh at Stranger Cay, north of Grand Bahama, are the first recorded from the Bahamas. Here they were common; and their chirp, as was pointed out at the time by Dr. Allen, who found them, was noticeably different from that of the other indigenous batrachians. As there are signs that this cay, though now uninhabited, has been cultivated in times past, it is possible that the species was introduced with imported plants. There were a number of the latter growing near the site of the single old house.

M. C. Z. No. 2419.

*Distribution.* — Southeastern North America generally.

**Hylodes ricordii** DUM. AND BIBB.

We collected twenty-nine examples of this species from New Providence Island, where it was decidedly common under heaps of rubbish of almost any nature, but particularly decaying palm leaves. A single specimen from Marsh Harbor, Island of Abaco, differs considerably from the Nassau specimens in that the tip of the snout is pallid, and there are two distinct parallel white lines running down the back. This specimen possibly represents a local race, but additional material is needed to determine this question. A single example from Mangrove Cay, Andros Island, is very pale, and there is a noticeable interruption medially in the long series of vomerine teeth. I strongly suspect that another local race inhabits this island.

M. C. Z. No. 2416; 2417; 2418.

*Distribution.* — Cuba, Bahamas, and extreme southern Florida.

## REPTILIA.

**Sphaerodactylus flavicaudus**, sp. nov.

Type series, fourteen specimens (M. C. Z. No. 6953) collected at Mangrove Cay, Andros Island, by Mr. Owen Bryant, August 1-7, 1904.

*Specific characters.* — Similar to *Sphaerodactylus decoratus* Garman in squamation, but differing widely in coloration and in proportions.

The general body color is that of pale cream, with the skin showing darker between the scales. Thus the entire surface appears to be covered with fine reticulations. On the tail this darker color shows itself in the form of rings. The tail, moreover, is bright orange-yellow. This species is more slender than *S. decoratus*. The head is unusually sharply pointed. In *S. decoratus*, particularly in the young, the length of the head and body considerably exceeds that of the tail. In *S. flavicaudus* the tail is almost always longer than the

head and body; in a few cases, however, these lengths were very nearly the same. The diameter of the tail at the base is less in the latter species than in the former.

The types were taken in chinks in the wall of the house in which Mr. Bryant stayed while at Mangrove Cay. He says that the species is very active and difficult to capture, except in the direct sunlight, when they appear to be somewhat dazed, and may be taken in the hand without difficulty.

### *Sphaerodactylus notatus* BAIRD.

This lizard is not uncommon about Nassau in some of the limestone caves, where several were captured running about on the walls. There are before me thirteen specimens from New Providence, two from Stranger Cay, and one from Little Abaco Island.

M. C. Z. No. 6971; 6972; 6974.

*Distribution.* — Cuba, Bahamas, and vicinity of Key West, Florida.

### *Sphaerodactylus decoratus* GARMAN.

In the collections made during the past summer there are thirty-two examples of this hitherto rare geckoid from Mangrove Cay, Andros Island, where Mr. Bryant found it very common about the houses, and also a single specimen from New Providence Island. These have been critically compared with the type, a single specimen from Rum Cay. There is also in the Museum of Comparative Zoölogy a single specimen from Andros Island, but the record is unpublished. So far as I can learn, the species has been heretofore unknown on New Providence.

M. C. Z. No. 6952; 6973.

*Distribution.* — Bahamas.

### *Anolis porcatus* GRAY.

This species was common on New Providence and Andros Islands; from the former locality eight specimens, and from the latter thirty-nine specimens were taken. We did not observe it at Abaco, whence it was recorded by Cope (Proc. U. S. Nat. Mus., Vol. 10, p. 437). A careful comparison of these specimens with others from Cuba shows a slight but apparently constant difference. In the Cuban specimens the longitudinal rugae of the head are rather more pronounced, and do not appear to involve so many scutes as in the Bahaman specimens. It is possible that this difference may warrant subspecific separation; but until a large series is available from various localities in Cuba, as well as in the Bahamas, a new name would only complicate this already over-perplexing genus.

M. C. Z. No. 6964; 6951.

*Distribution.* — Cuba, Bahamas, and Florida Keys.

**Anolis distichus** COPE.

Eighteen specimens of this species were taken on New Providence, and Mr. Owen Bryant obtained a fine series of fifty-four specimens from Mangrove Cay, Andros Island. It was very common on the big silk cotton-tree in Nassau, but is usually not so common as *A. sagrae*.

M. C. Z. No. 6950 ; 6956.

*Distribution.* — Bahamas, Haiti, and San Domingo.

**Anolis sagrae** BIBRON.

This is the most widely distributed and abundant lizard in the Bahamas, and we obtained it at a number of scattered localities: five at Little Abaco, five at Grand Bahama, three at Moraine Cay, two at Pensacola Cay, five at Elbow Cay, ten at Stranger Cay, one at Marsh Harbor, Abaco, twenty at New Providence; and Mr. Bryant collected ninety-two at Mangrove Cay, Andros Island.

M. C. Z. No. 6959; 6960; 6957; 6963; 6977.

*Distribution.* — Bahamas, Cuba, Yucatan, Jamaica, east coast of Central America, and Venezuela.

**Cyclura baeolopha** COPE.

Mr. Bryant obtained a good series of this species on Andros Island. He states that the natives hunt them regularly for food, and that he had no difficulty in procuring specimens from them. He saw none himself about the village.

M. C. Z. No. 6975.

*Distribution.* — Andros Island replaced on Watling's, Turk's, and Cat Islands by *C. rileyi*, *C. carinata*, and *C. nubila*.

**Liocephalus carinatus** GRAY.

We observed this species almost every day ashore during our cruise among the northern cays. Though recorded by Cope, it is unknown on New Providence Island, but it is said to occur on some of the small cays lying at some distance toward Eleuthera Island. Mr. Bryant states that it is unknown on "the mainland" of Andros, although not uncommon on certain of the outer cays. Specimens were taken at the following localities: Hopetown, Elbow Cay, three examples; Marsh Harbor, Abaco Island, two examples; Stranger Cay, one example; and Grand Bahama, one example.

M. C. Z. No. 6966; 6967; 6968.

*Distribution.* — Bahamas and Cuba.

**Ameira thoracica** COPE.

We collected fourteen specimens on New Providence Island and seven on Andros Island. I am unable to verify the occurrence of this species on the Island of Abaco, whence it was reported by Cope (Proc. U. S. Nat. Mus., Vol. 10, p. 438). Possibly the specimens were incorrectly labelled, and were from Andros Island. The species is said by Mr. Bryant to be rather common there, although I cannot find a previous record.

M. C. Z. No. 6948 ; 6965.

*Distribution.* — Bahamas.

**Typhlops lumbricalis** LINNÉ.

A single specimen of this species was taken by the writer about ten miles northwest of Marsh Harbor, Abaco Island. It was found tightly curled up under a large rock in a sweet-potato field. When touched, it became very active, and it was only after considerable manoeuvring that it was caught.

M. C. Z. No. 6970.

*Distribution.* — West Indies and Guianas.

**Epicrates strigilatus** COPE.

A single specimen of this species was seen in the hands of an animal-dealer in Nassau. It was a rather large specimen, measuring, I should judge, six and one-half or seven feet. There is a specimen in the Museum from the same locality. Recorded also from Andros Island by Garman (Proc. Amer. Philos. Soc., 1887, p. 279).

M. C. Z. No. 6242.

*Distribution.* — New Providence and Andros Islands, replaced by *E. chryso-gaster* on Turk's Island.

**Ungualia pardalis** GUNDLACH.

With a considerable series before me from New Providence Island, I disagree with Professor Cope in considering this species *U. maculata*. We took six specimens this summer; the writer obtained four previously, and there were two other specimens labelled *U. curta* by Garman, one from New Providence, the other from Cuba, in the Museum of Comparative Zoölogy. In all of these specimens part of the tail is black; in the smallest specimen only the extreme tip, in the largest specimen more than half. In some of these there are very many fine punctae on the gastrosteges, as well as the characteristic alternating spots. Two distinct color phases are evident; in three of the specimens the color is slaty-blue gray, the dorsal blotches being very distinct. In the others

the color is brownish or buff with the blotches rather inconspicuous. The squamation of these specimens exhibits a considerable range, and for this reason a table of the scale-counts is appended.

No. 6114.	" <i>U. curta</i> Garman."	Cuba.
	<u>25</u>	
Sc.	153 + 30	
No. 6491.	" <i>U. curta</i> Garman."	New Providence Island.
	<u>25</u>	
Sc.	159 + 31	
No. 6780.	<i>U. pardalis</i> Gund.	New Providence Island.
	<u>25</u>	
Sc.	154 + 33	
No. 6781.	<i>U. pardalis</i> Gund.	New Providence Island; three specimens.
	<u>23</u>	
a. Sc.	150 + 31	
	<u>25</u>	
b. Sc.	152 + 32	
	<u>25</u>	
c. Sc.	154 + 34	
No. 6969.	<i>U. pardalis</i> Gund.	New Providence Island; six specimens; collected in 1904.
	<u>25</u>	
a. Sc.	158 + 34	
	<u>25</u>	
b. Sc.	159 + 28	
	<u>25</u>	
c. Sc.	156 + 33	
	<u>23</u>	
d. Sc.	156 + 37	
	<u>25</u>	
e. Sc.	158 + 32	
	<u>25</u>	
f. Sc.	157 + 33	

*Distribution.* — Bahamas and Cuba.

### *Alsophis vudii* COPE.

Two specimens of this snake were caught on New Providence Island; Mr. Bryant took one on Andros. A comparison of these with Cuban specimens of *Alsophis* (= *Dromicus*) *angulifer* shows that Dr. Boulenger is mistaken in con-

sidering the former synonymous with the latter. As is rather often the case in the preparation of his otherwise monumental catalogues, he has united in his synonymy several perfectly valid species, possibly because he personally has not verified the descriptions from actual specimens. From his list it appears that there were no specimens of this species from the Bahamas in the British Museum.

M. C. Z. No. 6954 ; 6955.

*Distribution.* — New Providence and Andros Islands, Bahamas.